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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,224	05/23/2000	Lundy Lewis	APB-018	4214
959	7590	10/07/2005		
LAHIVE & COCKFIELD, LLP. 28 STATE STREET BOSTON, MA 02109			EXAMINER ENGLAND, DAVID E	
			ART UNIT 2143	PAPER NUMBER
DATE MAILED: 10/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/577,224

Applicant(s)

LEWIS, LUNDY

Examiner

David E. England

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/30/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1, 3 – 6 and 23 – 27 are presented for examination.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1 and 3 – 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The limitation of, “the alarms and the correlated alarms are types of messages to an overseer that something is wrong or about to go wrong” is indefinite. The omitted elements are: What would be considered “about to go wrong”. There are no elements that would give one of ordinary skill in that to determine when “something” is “about to go wrong”, nor is there any description as to what would be considered “wrong”, i.e., bottlenecking, packet error, entry of a hacker, etc.

5. Claims 3 – 6 are rejected for their dependency on claim 1.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 23, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maccabee et al. (6108700) (hereinafter Maccabee) in view of Roytman et al. (6356282) (hereinafter Roytman) in further view of Medhat et al. (6314103) (hereinafter Medhat).

8. As per claim 1, as closely interpreted by the Examiner, Maccabee teaches a method for managing network services associated with a service level management domain to provide service level management, the method comprising the steps of, (e.g. col. 6, lines 10 – 30 & col. 7, lines 37 – 60):

9. monitoring, by a plurality of monitoring agents, operational characteristics of a network service associated with a service level management domain and supporting one or more business processes under service level management, each monitoring agent detecting events of a select type of the associated operational characteristics from the network service and mapping such events into alarms, (e.g. col. 7, lines 37 – 60, “sensors” to also be interpreted as “agents”  
“When appropriate, the sensor generates an event that describes the change in state, when the where it has occurred, and any extra data necessary to uniquely identify the event(e.g., an event

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*describing that a file has been opened might include the name of the file as well as the file handle returned by the open activity for use in subsequent file accesses). ”);*

10. transmitting the alarms from the plurality of monitoring agents to an alarm correlation agent, which analyzes the alarms to produce correlated alarms, (e.g. col. 7, line 61 – col. 8, line 26, “...*any additional correlation data useful for later associating the event with other events to form transactions*”); but does not specifically teach transmitting the correlated alarms to an

enterprise management system to analyze across the network causes of the correlated alarms;

11. the alarms and the correlated alarms are types of messages to an overseer that something is wrong or about to go wrong.

12. Roytman also teaches transmitting the alarms from the plurality of monitoring agents to an alarm correlation agent, which analyzes the alarms to produce correlated alarms, (e.g. col. 5, lines 13 – 55); and

13. transmitting the correlated alarms to an enterprise management system to analyze across the network causes of the correlated alarms, (e.g. col. 2, lines 34 – 51, “*maps each managed-object-based alarm to a corresponding node...*”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Roytman with Maccabee because utilizing a function that analyzes information across the network and the causes of the correlated alarms could isolate specific areas that are malfunctioning, (e.g., a down link), and have the network reroute information to other areas that are not affected so to lower latency in the system.

14. Medhat teaches the alarms and the correlated alarms are types of messages to an overseer that something is wrong or about to go wrong, (e.g., col. 8, line 54 – col. 9, line 15, “... *react to any congestion that occurs, and to react when signs of impending congestion are found.*”). It

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would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Medhat with the combine systems of Maccabee and Roytman because notifying of congestion or imminent congestion conditions, could cause allocating resources more expeditiously, and forcing the bandwidth allocation system to re-arbitrate user parameters with the devices.

15. As per claim 24, as closely interpreted by the Examiner, Maccabee teaches the step of determining a state of the business process from the value, (e.g. col. 3, lines 25 – 38).

16. As per claim 26, as closely interpreted by the Examiner, Maccabee teaches the service level management domain comprises, an enterprise network, (e.g. col. 3, lines 25 – 38).

17. As per claim 27, as closely interpreted by the Examiner, Maccabee teaches a method for providing an entity with service level management of a business process, the method comprising the steps of:

18. monitoring a business process having at least one service associated with a service level management domain to provide service level management for an entity performing a business process, (e.g. col. 7, lines 37 – 60);

19. collecting data on one or more resources of a network associated with the service level management domain, the network being capable of performing one or more functions to provide the entity with a service to allow the entity to perform the business process, (e.g. col. 7, lines 37 – 60);

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20. monitoring one or more parameters from the collected data the one or more parameter providing an indication of an operational characteristic of the service provided by the network, (e.g. col. 7, lines 37 – 60), but does not specifically teach the service having a predefined state expressed as a range of values;

21. determining from the operational characteristic a value from the range of values, the value being a performance index of the service associated with the service level management domain indicating one of an acceptable state of the service, an unacceptable state of the service, or an imminent change from an acceptable state to an unacceptable state of the service; and

22. taking an action to effect a change to the one or more parameters if the value indicates either the unacceptable state of the service or the imminent change in the state of the service.

23. Roytman teaches the service having a predefined state expressed as a range of values, (e.g., col. 7, lines 46 – 65);

24. determining from the operational characteristic a value from the range of values, the value being a performance index of the service associated with the service level management domain indicating one of an acceptable state of the service, an unacceptable state of the service, or an imminent change from an acceptable state to an unacceptable state of the service, (e.g. col. 5, lines 13 – 55); and

25. Medhat teaches taking an action to effect a change to the one or more parameters if the value indicates either the unacceptable state of the service or the imminent change in the state of the service, (e.g., col. 8, line 54 – col. 9, line 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Medhat and Roytman with Maccabee because of similar reasons stated above.

26. Claim 23 is rejected for similar reasons as stated above.

27. Claims 3 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maccabee, Roytman and Medhat as applied to claim 1, and in further view of Koperda et al. (6230203) (hereinafter Koperda).

28. As per claim 3, as closely interpreted by the Examiner, Maccabee, Roytman and Medhat teach all that is described above that is similar in scope to claim 1, Roytman further teaches reporting, to a user, information regarding at least one of a group including availability, faults, configuration, integrity, security, reliability, performance and accounting of the measured level of service, (e.g. col. 2, line 18 – col. 3, line 44, “*node status is propagated to application like the Solstice EM Viewer*” & col. 7, line 35 – col. 8, line 34, “*window display 600*”); and

29. the component information representing operational data of one or more monitored components, (e.g. col. 2, line 18 – col. 3, line 44, “*node status is propagated to application like the Solstice EM Viewer*” & col. 7, line 35 – col. 8, line 34, “*window display 600*”), but does not specifically teach relating component information to a service upon which a business process depends,

30. determining a state of the business process based upon the component information, wherein the component information determines a measured level of service and wherein the level of service affects the operation of the business process. Koperda teaches relating component information to a service upon which a business process depends, (e.g. col. 1, line 65 – col. 2, line



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41, *“quality of play, parameters we considered include access time, delivery duration, bandwidth...”* & col. 4, lines 2 – 64, *“collects and reports statistics for level of service”*),

31. determining a state of the business process based upon the component information, wherein the component information determines a measured level of service and wherein the level of service affects the operation of the business process, (e.g. col. 1, line 65 – col. 2, line 41, *“quality of play, parameters we considered include access time, delivery duration, bandwidth...”* & col. 4, lines 2 – 64, *“collects and reports statistics for level of service”*). It would have been obvious to one skilled in the art at the time the invention was made to combine Koperda with the combine system of Maccabee, Roytman and Medhat because utilizing a display to view the state of the business process could aid in a more efficient transmission system for when a transmission path is “jammed” and data needs to be redirected to a different path so the data can be delivered to its destination.

32. As per claim 4, Maccabee, Roytman and Medhat do not specifically teach determining service parameters to measure the level of service. Koperda teaches determining service parameters to measure the level of service, (e.g. col. 1, line 65 – col. 2, line 41 & col. 4, lines 2 – 64, *“collects and reports statistics for level of service”*). It would have been obvious to one skilled in the art at the time the invention was made to combine Koperda with the combine system of Maccabee and Roytman because of similar reasons as stated above. Furthermore, measuring the level of service aids in the determination of which alternate path data should use in the case of a congested network.

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33. As per claim 5, as closely interpreted by the Examiner, Maccabee, Roytman and Medhat teach all that is described above that is similar in scope to claim 1, Roytman further teaches representing the component information by one or more component parameters and wherein the component parameters are mapped into the service parameters, (e.g. col. 6, line 40 – col. 7, line 35, “*network alarms, alarm services module*” & col. 7, lines 46 – 65, “*critical, major, warning, minor...* ”). It would have been obvious to one skilled in the art at the time the invention was made to combine Roytman with Maccabee and because of similar reasons as stated above.

34. As per claim 6, as closely interpreted by the Examiner, Maccabee, Roytman and Medhat teach all that is described above that is similar in scope to claim 1, Roytman further teaches determining parameters with predetermined service levels, (e.g. col. 6, line 40 – col. 7, line 35, “*network alarms, alarm services module*” & col. 7, lines 46 – 65, “*critical, major, warning, minor...* ”), but does not specifically teach whether service levels are satisfied by comparing service whether service levels are satisfied by comparing service. Koperda teaches whether service levels are satisfied by comparing service parameters, (e.g. col. 1, line 65 – col. 2, line 41 & col. 4, lines 2 – 64, “*collects and reports statistics for level of service*”). It would have been obvious to one skilled in the art at the time the invention was made to combine Koperda with the combine system of Maccabee, Roytman and Medhat because of similar reasons stated above.

35. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maccabee and Roytman as applied to claim 23, and in further view of Bhoj et al. (6304892) (hereinafter Bhoj).

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36. As per claim 25, as closely interpreted by the Examiner, Maccabee, Roytman and Medhat teach all that is described above that is similar in scope to claim 23, Maccabee further teaches monitoring the service level of the service to monitor the business process, (e.g. col. 2, lines 21 – 25 & col. 3, lines 25 – 38), but neither Maccabee, Roytman and Medhat specifically teach determining a service level of the service, the service level being defined by a service level agreement. Bhoj teaches determining a service level of the service, the service level being defined by a service level agreement, (e.g. col. 6, line 62 – col. 7, line 7); and

37. monitoring the service level of the service to monitor the business process, (e.g. col. 6, line 62 – col. 7, line 7 & col. 7, lines 39 – 47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bhoj with the combine system of Maccabee, Roytman and Medhat because when two system agree on a specific service level, the service provider could be guaranteeing 100% availability of the backbone of the service provider as well as the customer access circuit ordered by the service provider, making for a high level of service.

### *Response to Arguments*

38. Applicant's arguments with respect to claims 1, 3 – 6 and 23 – 27 have been considered but are moot in view of the new ground(s) of rejection.

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39. Applicant is advised to go into more detail on limitations that lead towards what ranges might consist of, acceptability of states and what is considered acceptable and determining how something is "about to go wrong".

### *Conclusion*

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

41. a. Aubert et al. U.S. Patent No. 6167027 discloses Flow control technique for X.25 traffic in a high speed packet switching network.

42. b. Glitho et al. U.S. Patent No. 6233449 discloses Operation and maintenance control point and method of managing a self-engineering telecommunications network.

43. c. Chandra et al. U.S. Patent No. 6397359 discloses Methods, systems and computer program products for scheduled network performance testing.

44. d. Fletcher et al. U.S. Patent No. 6321264 discloses Network-performance statistics using end-node computer systems.

45. e. Fletcher et al. U.S. Patent No. 6269401 discloses Integrated computer system and network performance monitoring.

46. f. Liu U.S. Patent No. 5825759 discloses Distributing network services and resources in a mobile communications network.

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47. g. Chaudhuri U.S. Patent No. 6411946 discloses Route optimization and traffic management in an ATM network using neural computing.

48. h. Djoko et al. U.S. Patent No. 6085335 discloses Self engineering system for use with a communication system and method of operation therefore.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912.

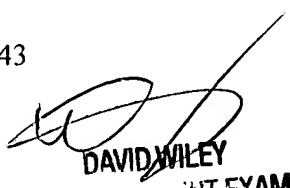
The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England  
Examiner  
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De



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